

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings of claims in the application:

Claim 1 (currently amended): A network backplane interface for a local network, comprising:

- (a) a circuit board;
- (b) a plurality of sockets connected to the circuit board for receiving plug-in network devices;
- (c) power lines on the circuit board to one or more of the plurality of the sockets for powering a plug-in network device when placed in each socket;
- (d) communication lines on the circuit board to one or more of the plurality of sockets for communication with a plug-in network when placed in each socket;
- (e) a housing for the circuit board, power lines and communication lines, including openings for exposing said sockets; and
- (f) a network interface for communication between the plug-in network and an external network, and

(g) a configuration circuit on the circuit board, wherein the configuration circuit is operable to communicate with a plug-in device in a socket to identify the plug-in device and configure the plug-in device, and the configuration circuit includes:

an instruction memory operable to store configuration instructions for configuring one or more different plug-in devices to perform one or more corresponding desired functions, and a processor operable to execute the configuration instructions to communicate with a plug-in device in a socket, and configure the device,

wherein the configuration circuit includes a configuration memory operable to store configuration information for a plurality of predetermined plug-in device types, and

the configuration circuit is operable to receive the configuration associated with a device from the device, wherein executing the configuration instructions configures the device based on the configuration information.

Claim 2 (original): The backplane of claim 1, further comprising a communication controller which allows communication between the plug-in devices.

Claim 3 (currently amended): The backplane of claim 1, wherein the configuration circuit is further operable to generate a user interface based on the component information, to cause display of the user interface, to receive a configuration command for the device via the user interface, and to configure the device based on the configuration command.

~~further comprising a configuration circuit on the circuit board which allows configuring function of one or more plug-in devices to perform desired functions.~~

Claim 4 (currently amended): The backplane of claim 1, wherein the desired functions comprise a modem function, a broadband access function, firewall security protection, a router function, a hub function, a switch function, a network-attached storage function, a printer server function, or a combination thereof. ~~3, wherein the configuration circuit communicates with a plug-in device in a socket to identify the plug-in device and configure the plug-in device for network communication function.~~

Claim 5 (original): The backplane of claim 3, wherein the configuration circuit comprises:

- (1) memory for storing configuration instructions for configuring one or more different plug-in devices, and
- (2) processor for executing the configuration instructions to communicate with a plug-in device in a socket, and configure that device for network communication.

Claim 6 (canceled): The backplane of claim 3, wherein the configuration circuit includes a configuration memory having configuration information for a plurality of predetermined plug-in device types.

Claim 7 (previously presented): The backplane of claim 1, wherein the network interface comprises a multiple100baseT Ethernet connector.

Claim 8 (currently amended): The backplane of claim [[3]] 1, wherein the configuration circuit includes an embedded configuration module to configure plug-in devices in a configuration session.

Claim 9 (original): The backplane of claim 8, wherein the configuration module configures all plug-in devices in one configuration session.

Claim 10 (original): The backplane of claim 9, wherein the configuration module comprises a platform-independent configuration software.

Claim 11 (previously presented): The backplane of claim 9, wherein the configuration circuit provides a user interface for receiving user configuration commands to configure function of one or more plug-in devices to perform a desired function, wherein the user interface is operable to configure the one or more plug-in devices in one session.

Claim 12 (original): The backplane of claim 1, wherein at least one socket is dedicated to connection and communication with an external network.

Claim 13 (original): The backplane of claim 12, further including a switch for connecting a security module between said socket for external connection, and the local network.

Claim 14 (original): The backplane of claim 13, further including a connection for bridging a security module between said socket for external connection, and the local network.

Claim 15 (original): The backplane of claim 1, wherein a socket comprises a RJ-45 socket.

Claim 16 (original): The backplane of claim 1, wherein a socket comprises a proprietary connector combining power and data connections.

Claim 17 (previously presented): A network backplane interface for a local network, comprising:

- (a) a plurality of sockets for receiving plug-in network devices;

- (b) power lines to one or more sockets for powering a plug-in network device in each socket;
- (c) communication lines to each socket for communication with the plug-in network devices; and
- (d) a configuration module for functional configuration of one or more plug-in devices, wherein the configuration module communicates with each plug-in device in each socket to identify the plug-in device and configure function of the plug-in device to perform desired functions; and
- (e) a network interface for communication between the plug-in network and an external network.

Claim 18 (original): The backplane of claim 17, wherein the configuration module comprises:

- (1) memory for storing configuration instructions for configuring one or more different plug-in devices, and
- (2) processor for executing the configuration instructions to communicate with a plug-in device in a socket, and configure that device for network communication.

Claim 19 (original): The backplane of claim 17, wherein the configuration module includes a configuration memory having configuration information for a plurality of predetermined plug-in device types.

Claim 20 (original): The backplane of claim 19, wherein the configuration module includes extended configuration memory for storing configuration information for additional device types.

Claim 21 (previously presented): The backplane of claim 17, wherein the configuration module allows configuring plug-in devices in a configuration session for network communication among the plug-in devices.

Claim 22 (original): The backplane of claim 21, wherein the configuration module configures all plug-in devices in one configuration session.

Claim 23 (original): The backplane of claim 22, wherein the configuration module comprises a platform-independent configuration software.

Claim 24 (previously presented): The backplane of claim 22, wherein the configuration module provides a user interface for receiving user configuration commands to configure function of one or more plug-in devices to perform a desired function, wherein the user interface is operable to configure the one or more plug-in devices in one session.

Claim 25 (previously presented): A network interface module for a local network, comprising:

- (a) a circuit board having a plurality of sockets for receiving plug-in network devices;
- (b) power lines on the circuit board to one or more of the sockets for powering a plug-in network device in each socket;
- (c) a switch on the circuit board connected to one or more of the sockets allowing communication with plug-in network devices when placed in one or more of the sockets; and
- (d) a configuration module on the circuit board for functional configuration of one or more plug-in devices when placed in one or more of the sockets, wherein the configuration module communicates with each plug-in device in each socket to identify the plug-in device and configure the plug-in device to perform selected functions; and
- (e) a network interface for communication between the plug-in network and an external network.

Claim 26 (original): The network interface module of claim 25, wherein the configuration module comprises:

- (1) memory for storing configuration instructions for configuring one or more different plug-in devices, and
- (2) processor for executing the configuration instructions to communicate with a plug-in device in a socket, and configure that device for network communication.

Claim 27 (original): The network interface module of claim 25, wherein the configuration module includes a configuration memory having configuration information for a plurality of predetermined plug-in device types.

Claim 28 (original): The network interface module of claim 27, wherein the configuration module includes extended configuration memory for storing configuration information for additional device types.

Claim 29 (previously presented): The network interface module of claim 25, wherein the configuration module allows configuring plug-in devices in a configuration session for network communication among the plug-in devices.

Claim 30 (original): The network interface module of claim 29, wherein the configuration module configures all plug-in devices in one configuration session.

Claim 31 (original): The network interface module of claim 30, wherein the configuration module comprises a platform-independent configuration software.

Claim 32 (previously presented): The network interface module of claim 30, wherein the configuration module provides a user interface for receiving user configuration commands to configure function of one or more plug-in devices to perform a desired function, wherein the user interface is operable to configure the one or more plug-in devices in one session.

Claim 33 (previously presented): The network interface module of claim 25 further comprising a housing for the circuit board sockets, the housing including slots for exposing said sockets.

Claim 34 (previously presented): The network interface module of claim 33 wherein the circuit board comprises a printed circuit board.

Claim 35 (previously presented): The backplane of claim 8, wherein the configuration module provides a common user interface for receiving user configuration commands to configure each plug-in device from the common user interface.

Claim 36 (previously presented): The backplane of claim 35 wherein the common user interface further receives user configuration commands to configure the backplane.

Claim 37 (previously presented): The backplane of claim 36 wherein the common user interface is platform and operating system independent, and utilizes a common communication protocol between the plug-ins and the configuration module.

Claim 38 (previously presented): The backplane of claim 36 wherein the common user interface comprises a graphical user interface.

Claim 39 (previously presented): The backplane of claim 36 wherein the configuration circuit is accessible via a web browser to configure the plug-in devices.

Claim 40 (previously presented): The backplane of claim 4 wherein the configuration circuit further includes embedded configuration instructions for configuring one or more different plug-in devices, such that the configuration circuit uses identity of each plug-in device to obtain corresponding configuration instructions for configuring the different plug-in devices.

Claim 41 (previously presented): The backplane of claim 4 wherein if a plug-in device is not recognized by the configuration circuit, then the configuration circuit obtains configuration instructions for the unrecognized device from a source external to the configuration circuit.

Claim 42 (previously presented): The backplane of claim 41 wherein if a plug-in device is not recognized by the configuration circuit, then the configuration circuit obtains configuration instructions for the unrecognized device from a user.

Claim 43 (previously presented): The backplane of claim 41 wherein if a plug-in device is not recognized by the configuration circuit, then the configuration circuit obtains configuration instructions for the unrecognized device from the unrecognized device itself.